AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-89. (canceled).

90. (currently amended): A method for discharge surface treatment of a work piece with an electrode, the electrode being made of a green compact obtained by compression-molding an electrode material including powder of any of a metal and a metallic compound, and the discharge surface treatment generating an electric discharge between the electrode and the work piece in an atmosphere of a machining medium and forming a film of a machining material on a surface of a work piece using energy produced by the electric discharge, comprising:

forming the film using an electrode obtained by compression-molding powder with an average value of particle diameters not less than 10 nanometers and ~~not more than~~ less than 1 micrometers ~~by using electrode material that is capable of~~

wherein the forming the film comprises forming a thick film with thickness not less than 100 micrometers.

91. (canceled).

92. (previously presented): The method according to claim 90, wherein

the electrode and the work piece are arranged in a machining fluid or a predetermined gas atmosphere, and

electric discharge is performed in the machining fluid or the predetermined gas atmosphere.

93. (previously presented): The method according to claim 90, wherein a pulse current with a discharge pulse width not more than 70 microseconds and a peak current value not more than 30 amperes is supplied between the electrode and the work piece.

94. (previously presented): The method according to claim 90, wherein the powder is powder of metal, a metal compound, or ceramics.

95. (currently amended): A method for discharge surface treatment of a work piece with an electrode, the electrode being made of a green compact obtained by compression-molding an electrode material including powder of any of a metal and a metallic compound, and the discharge surface treatment generating an electric discharge between the electrode and the work piece in an atmosphere of a machining medium and forming a film of a machining material on a surface of a work piece using energy produced by the electric discharge, comprising:

forming the film using an electrode obtained by compression-molding powder mixed with powder having a particle diameter not less than 10 nanometers and ~~not more~~ less than 1 micrometers mixed in a proportion not less than 10% in the powder,

wherein said forming the film comprises forming ~~and using electrode material that is capable of forming~~ a thick film with thickness not less than 100 micrometers.

96. (previously presented): The method according to claim 95, wherein the electrode contains 80% or more of powder having an average value of particle diameters not less than 10 nanometers and not more than 1 micrometer.

97. (previously presented): The method according to claim 96, wherein

the electrode and the work piece are arranged in a machining fluid or a predetermined gas atmosphere, and

electric discharge is performed in the machining fluid or the predetermined gas atmosphere.

98. (previously presented): The method according to claim 96, wherein a pulse current with a discharge pulse width not more than 70 microseconds and a peak current value not more than 30 amperes is supplied between the electrode and the work piece.

99. (previously presented): The method according to claim 96, wherein the powder is powder of metal, a metal compound, or ceramics.

100. (previously presented): A method for discharge surface treatment of a work piece with an electrode, the electrode being made of a green compact obtained by compression-molding an electrode material including powder of any of a metal and a metallic compound, and the discharge surface treatment generating an electric discharge between the electrode and the work piece and forming a film of a machining material on a surface of a work piece using energy produced by the electric discharge, comprising:

forming the film by using an electrode obtained by mixing a small-diameter powder having a distribution of small particle diameters and a large-diameter powder having an average particle diameter twice or more as large as the small-diameter powder and compression-molding the powders, the large-diameter powder being in 5 to 60 volume percent, and by using electrode material that is capable of forming a thick film with thickness not less than 100 micrometers.

101. (previously presented): The method according to claim 100, wherein the small-diameter powder is powder refined by grinding.

102. (currently amended): The method according to claim 100, wherein the large-diameter powder has ~~a substantially spherical~~ aspherical shape.

103. (previously presented): The method according to claim 100, wherein the small-diameter particle and the large-diameter particle have an identical component.

104. (previously presented): The method according to claim 100, wherein the powder of any of the metal and the metallic compound is any one of Co alloy, Ni alloy, and Fe alloy.

105. (previously presented): The method according to claim 100, wherein the large-

diameter powder is in 5 to 20 volume percent.

106. (previously presented): The method according to claim 100, wherein

the electrode and the work piece are arranged in a machining fluid or a predetermined gas atmosphere, and

electric discharge is performed in the machining fluid or the predetermined gas atmosphere.

107. (previously presented): The method according to claim 100, wherein a pulse current with a discharge pulse width not more than 70 microseconds and a peak current value not more than 30 amperes is supplied between the electrode and the work piece.

108. (previously presented): A method for discharge surface treatment of a work piece with an electrode, the electrode being made of a green compact obtained by compression-molding an electrode material including powder of any of a metal and a metallic compound, and the discharge surface treatment generating an electric discharge between the electrode and the work piece and forming a film of a machining material on a surface of a work piece using energy produced by the electric discharge, comprising:

forming the film by using an electrode obtained by mixing a small-diameter powder having a distribution of small particle diameters not more than 3 micrometers and a large-diameter powder having an average particle diameter not less than 5 micrometers and compression-molding the powders, the large-diameter powder being in 5 to 60 volume percent, and by using electrode material that is capable of forming a thick film with thickness not less than 100 micrometers.

109. (previously presented): The method according to claim 108, wherein the small-diameter powder is powder refined by grinding.

110. (previously presented): The method according to claim 108, wherein the large-

diameter powder has a substantially spherical shape.

111. (previously presented): The method according to claim 108, wherein the small-diameter particle and the large-diameter particle have an identical component.

112. (previously presented): The method according to claim 108, wherein the powder of any of the metal and the metallic compound is any one of Co alloy, Ni alloy, and Fe alloy.

113. (previously presented): The method according to claim 108, wherein the large-diameter powder is in 5 to 20 volume percent.

114. (previously presented): The method according to claim 108, wherein

the electrode and the work piece are arranged in a machining fluid or a predetermined gas atmosphere, and

electric discharge is performed in the machining fluid or the predetermined gas atmosphere.

115. (previously presented): The method according to claim 108, wherein a pulse current with a discharge pulse width not more than 70 microseconds and a peak current value not more than 30 amperes is supplied between the electrode and the work piece.

116-143. (canceled)

144. (previously presented): The method according to claim 100, wherein the small-diameter powder and the large-diameter powder are made of identical material.

145. (previously presented): The method according to claim 100, wherein the small-diameter powder and the large-diameter powder are made of identical alloy material and wherein the identical alloy material is one of Co alloy, Ni alloy, and Fe alloy.

146. (previously presented): The method according to claim 108, wherein the small-diameter powder and the large-diameter powder are made of identical material.

147. (previously presented): The method according to claim 108, wherein the small-diameter powder and the large-diameter powder are made of identical alloy material and wherein the identical alloy material is one of Co alloy, Ni alloy, and Fe alloy.